

LISTING AND STATUS OF CLAIMS INCLUDING AMENDMENTS

1-50. (canceled)

51. (previously presented) An electronic system for use with an exhaustible power source, an energy consuming load being primarily a light generating element and a power switch configured to be connected to said power source and to said load, and to control by on/off switching energy flow from said power source to said load, said power source, load and power switch being disposed in a housing, said system comprising:

(a) a microchip disposed in said housing and having at least a first input, said first input receiving a signal that indicates when said load has been activated or deactivated and, when in use with said exhaustible power source and said load, said first input does not form a serial link between the power source and the load; and

(b) a flashing find-in-the-dark location indicator and a flashing light emitting power source level indicator disposed in said housing and controlled by said microchip to be active when the load is not energized and said electronic system is only powered by said exhaustible power source and not connected to another power source.

52. (previously presented) An electronic system according to claim 51 wherein said microchip is configured to change an activation/deactivation sequence of at least one of said indicators to indicate a change in an ~~the~~ operating mode of the system.

53. (previously presented) An electronic system according to claim 52 wherein said power source level indicator and said find-in-the-dark indicator are combined.

54. (previously presented) An electronic system according to claim 53 wherein said system further includes a signal switch connected to said first input of said microchip and said microchip is additionally configured to control:

an automatic delayed shut-off function in response to an activation signal received at said first input from said signal switch with said signal switch comprising an activating/deactivating user interface and not forming a serial link between said power source and said load, and said power switch controlled by said microchip.

55. (previously presented) An electronic system according to claim 52 wherein said system further includes a signal switch connected to said first input of said microchip and said microchip is additionally configured to control:

an automatic delayed shut-off function in response to an activation signal received at said first input from said signal switch with said signal switch comprising an activating/deactivating user interface and not forming a serial link between said power source and said load, and said power switch controlled by said microchip.

56. (previously presented) An electronic system according to claim 51 wherein said power source level indicator said find-in-the-dark indicator are combined.

57. (previously presented) An electronic system according to claim 51 wherein said system further includes a signal switch connected to said first input of said microchip and said microchip is additionally configured to control:

an automatic delayed shut-off function in response to an activation signal ~~on~~ received at said first input from said signal switch with said signal switch comprising an activating/deactivating user interface and not forming a serial link between said power source and said load, and said power switch controlled by said microchip.

58. (previously presented) An electronic system for use with an exhaustible power source, an energy consuming load being primarily an electric motor and a power switch configured to be connected to said power source and to said load, and to control by on/off switching energy flow from said power source to said load, said power source, load and power switch being disposed in a housing, said system comprising:

(a) a microchip disposed in said housing and having at least a first input, said first input receiving a signal that indicates when said load has been activated or deactivated and, when in use with said exhaustible power source and said load, said first input does not form a serial link between the power source and the load; and

(b) a flashing find-in-the-dark location indicator and a light emitting power source level indicator disposed in said housing and controlled by said microchip to be active when the load is not energized and said electronic system is only powered by said exhaustible power source and not connected to another power source.

59. (previously presented) An electronic system according to claim 58 wherein said microchip is configured to change an activation/deactivation sequence of at least one of said indicators to indicate a change in an operating mode of the system.

60. (previously presented) An electronic system according to claim 58 wherein said system further includes a signal switch connected to said first input of said microchip and said microchip is additionally configured to control:

an automatic delayed shut-off function in response to an activation signal ~~on~~ received at said first input from said signal switch with said signal switch comprising an activating/deactivating user interface and not forming a serial link between said power source and said load, and said power switch controlled by said microchip.

61. (previously presented) An electronic system for use with an exhaustible power source, an energy consuming load being primarily a radio and a power switch configured to be connected to said power source and to said load, and to control by on/off switching energy flow from said power source to said load, said power source, load and power switch being disposed in a housing, said system comprising:

(a) a microchip disposed in said housing and having at least a first input, said first input receiving a signal that indicates when said load has been activated or deactivated and, when in use with said exhaustible power source and said load, said first input does not form a serial link between the power source and the load; and

(b) a flashing find-in-the-dark location indicator and a light emitting power source level indicator disposed in said housing and controlled by said microchip to be active when the load is not energized and said electronic system is only powered by said exhaustible power source and not connected to another power source.

62. (previously presented) An electronic system according to claim 61 wherein said system further includes a signal switch connected to said first input of said microchip and said microchip is additionally configured to control:

an automatic delayed shut-off function in response to an activation signal ~~on~~ received at said first input from said signal switch with said signal switch comprising an activating/deactivating user interface and not forming a serial link between said power source and said load, and said power switch controlled by said microchip.

63. (previously presented) An electronic system for use, with an exhaustible power source, a power switch, and an energy consuming load being a light generating element, said system comprising:

(a) a microchip having at least a first input, said first input receiving a signal from a signal switch when said load is activated or deactivated and, when in use with said power source and said load, said signal switch does not form a serial link between the power source and the load;

(b) said power switch configured to be connected to said power source and to said load and to control by on/off switching energy flow from said power source to said load;

(c) said microchip further controlling an automatic delayed shut-off function of said load, with said signal switch acting as an activation/deactivation user interface and said microchip controlling the said power switch to shut off after a predetermined period of time, in response to the receipt of an activation signal;

(d) a find-in-the-dark indicator that is active when said load is deactivated and said power source is not being charged;

(e) a power source level indicator which is combined with said find-in-the-dark indicator; and

said microchip further controlling at least one function selected from the group consisting of:

an average power reduction of said energy flow from said power source to said load;

an intermittent activation function of said load; and

a code sequence of activations of said load.

64. (previously presented) An electronic system according to claim 63 wherein said circuit further comprises a power source level indicator function that is active when the power source is not being charged.

65. (previously presented) An electronic system according to claim 63 wherein said microchip controls charging of said power source.

66-68. (canceled)

69. (previously presented) An electronic system according to claim 63 wherein the microchip determines the selection of a specific function by a user, based on at least two parameters selected from the group consisting of the time duration of activation signals, the time duration between activation signals, and the number of activation signals, at said first input.

70-71. (canceled)

72. (previously presented) An electronic system for use with an exhaustible power source, a power switch, and an energy consuming load being a light generating element, said system comprising:

(a) a microchip having at least a first input, said first input receiving a signal from a signal switch when said load is activated or deactivated and, when in use with said power source and said load, said signal switch does not form a serial link between the power source and the load;

(b) said power switch configured to be connected to said power source and to said load and to control by on/off switching energy flow from said power source to said load;

(c) said microchip further controlling an automatic delayed shut-off function of said load, with said signal switch acting as an activation/deactivation user interface and said microchip controlling the said power switch to shut off after a predetermined period of time, in response to the receipt of an activation signal; and

(d) wherein the microchip determines the selection of a specific function by a user, based on the time duration of activation signals, the time duration between activation signals, and the number of activation signals, at said first input.

73. (previously presented) An electronic system according to claim 72 wherein said microchip further controls a find-in-the-dark indicator function that is active when the power source is not being charged.

74. (previously presented) An electronic system according to claim 73 wherein said microchip controls the reduction of power to said load.

75. (previously presented) An electronic system according to claim 72 wherein said microchip further controls a power source level indicator.

76. (previously presented) An electronic system according to claim 75 wherein said power source level indicator is combined with a ~~the~~ find-in-the-dark indicator.

77. (currently amended) An electronic system according to claim 72 further controlling, in response to at least a signal received on said first input, at least one function selected from the group consisting of:

- a reduction in average power to said load;
- an intermittent activation function of said load; and
- a code sequence of activations of said load.

78. (previously presented) An electronic system according to claim 77 wherein said microchip is configured to accept commands from another controller, said commands comprising at least an address field.

79. (currently amended) An electronic system according to claim ~~77~~ 73 wherein said microchip is configured to accept commands from another controller, said commands comprising at least an address field.

80. (previously presented) An electronic system for use with an exhaustible power source, a power switch, and a light generating load, said system comprising:

- (a) a microchip having at least a first input, said first input receiving a signal from a signal switch that indicates when said load has been activated or deactivated and,

when in use with said power source and said load, said signal switch does not form a serial link between the power source and the load;

(b) said power switch configured to be connected to said power source and to said load, and to control by on/off switching energy flow from said power source to said load; and

(c) said microchip configured to control a reduction of power to said load; and

(d) said microchip further configured to provide:

a flashing find-in-the-dark location indicator function that is active when the load is not switched “on” and the power source is not being charged; and

a light emitting power source level indicator function that is active when the load is not switched “on.”

81. (previously presented) A system according to claim 80 wherein said microchip is configured so that at least one of said indicator functions provides a changed indicator activation/deactivation sequence to indicate a change in the operating mode of the system.

82. (previously presented) A system according to claim 81 wherein said power source level indicator function and said find-in-the-dark indicator are combined.

83. (previously presented) A system according to claim 80 wherein said microchip is additionally configured to control:

an automatic delayed shut-off function in response to an activation signal on said first input, with said power switch controlled by said microchip.

84. (previously presented) An electronic system for use with an exhaustible power source, an energy consuming load being a light generating element and a power switch configured to be connected to said power source and to said load and to control by on/off switching energy flow from said power source to said load, said system comprising:

(a) a microchip having at least a first input, said first input receiving a signal from a signal switch that indicates a user function selection and, when in use with said power source and said load, said signal switch does not form a serial link between the power source and the load;

(b) said microchip further controlling an automatic delayed shut-off function of said load, with said signal switch acting as an activation/deactivation user interface and said microchip controlling said power switch to shut off after a predetermined period of time in response to the receipt of an activation signal; and

(c) wherein the microchip determines the selection of a specific function by a user, based on at least two parameters selected from the group consisting of the time duration of activation signals, time duration between activation signals, and the number of activation signals, at said first input.

85. (previously presented) An electronic system according to claim 84 wherein said system further comprises a power source level indicator that is active when said power source is not being charged.

86. (previously presented) An electronic system according to claim 84 wherein said microchip is configured to control a find-in-the-dark indicator.

87. (previously presented) An electronic system according to claim 86 wherein said microchip is further configured to control a power source level indicator function that is active when said load is deactivated, and wherein the power source level indicator is combined with said find-in-the-dark indicator.

88. (currently amended) An electronic system according to claim ~~84~~ 87 wherein said microchip is further configured to control, in response to at least a signal received on said first input, at least one function selected from the group consisting of:

an average power adjustment function of said energy flow from said power source to said load;

an intermittent activation function of said load; and

a code sequence of activations of said load.

89. (previously presented) An electronic system according to claim 84 wherein said microchip is configured to accept commands from another controller, said commands comprising at least an address field.

90. (previously presented) An electronic system for use with an exhaustible power source, a power switch, and a light generating load, said system comprising:

(a) a microchip having at least a first input, said first input receiving a signal from a signal switch that indicates when said load has been activated or deactivated and, when in use with said power source and said load, said signal switch does not form a serial link between the power source and the load;

(b) said power switch configured to be connected to said power source and to said load, and to control by on/off switching energy flow from said power source to said load;

(c) said microchip configured to control a reduction of power to the load; and

(d) said electronic circuit further controlling:

a flashing find-in-the-dark location indicator that is active when the load is not switched "on" and the power source is not being charged.

91. (previously presented) An electronic system according to claim 90 wherein said microchip controls an automatic delayed shut-off function in response to an activation signal with said power switch controlled by said microchip.

92. (previously presented) An electronic system according to claim 90 wherein said microchip is configured to determine the selection of a specific function by a user based on at least two parameters selected from the group consisting of the time duration of activation signals, the time duration between activation signals, and the number of activation signals, at said first input.

93. (previously presented) An electronic system according to claim 91 wherein said microchip is configured to accept commands from another controller, said commands comprising at least an address field.

94. (previously presented) An electronic system according to claim 92 wherein said microchip is configured to accept commands from another controller, said commands comprising at least an address field.

95. (previously presented) An electronic system according to claim 84 wherein said system forms a part of a flashlight.

96. (previously presented) An electronic system according to claim 51 wherein said system forms a part of a flashlight.

97. (previously presented) An electronic system according to claim 90 wherein said system is part of a flashlight.

98. (new) An electronic system according to claim 77 wherein said microchip also controls an average power reduction to the load through an intermittent power delivery sequence from said power source such that any dead period when the power source is not connected to the load is not easily visible to the user.

99. (new) An electronic system according to claim 88 wherein said microchip also controls an average power reduction to the load through an intermittent power delivery sequence from said power source such that any dead period when the power source is not connected to the load is not easily visible to the user.

100. (new) An electronic system according to claim 84 wherein said microchip also controls a gradual adjustment in power supplied to the load in response to a user action , such that the gradual change is smooth.

101. (new) An electronic system according to claim 99 wherein said microchip also controls a gradual adjustment in power supplied to the load in response to a user action, such that the gradual adjustment is smooth.

102. (new) An electronic system according to claim 99 wherein the microchip, the signal switch and the light source are each attached to and/or enclosed in a casing.

103. (new) An electronic system according to claim 99, wherein said system is configured to be a lighting unit and wherein the microchip is always powered when a power source that is not exhausted is installed correctly with the electronic system.

104. (new) An electronic system according to claim 100, wherein said system is configured to be a lighting unit and wherein the microchip is always powered when a power source that is not exhausted is installed correctly with the electronic system.

105. (new) An electronic system according to claim 99 wherein the microchip is further configured to control an indication of the power source level.

106. (new) An electronic system according to claim 100 wherein said microchip is configured to accept commands from another controller, said command comprising at least an address field.

107. (new) An electronic system according to claim 84 wherein the signal switch connected to the first input is a touch pad or touch sensor.

108. (new) An electronic system according to claim 101 wherein the signal switch connected to the first input is a touch pad or touch sensor.